CLAIMS AMENDMENT

Claim 1 (Currently amended). A method for separating nucleic acid from a test sample comprising:

a) contacting a test sample with a metal oxide support material and a binding buffer such that the nucleic acid bonds with the metal oxide support material to form complexes without prior purification or precipitation of the nucleic acid, wherein the binding buffer comprises

a chaotropic agent and

a detergent

and wherein the binding buffer contains no or a low concentration of organic solvent such that the flashpoint of the binding buffer is greater than 130 degrees Fahrenheit;

b) separating the complexes from the test sample; and

c) eluting the nucleic acid from the metal oxide support material, thereby separating the nucleic acid from the test sample,

wherein step a) allows the nucleic acids to be directly employed in an amplification reaction without exchanging an elution buffer and wherein the test sample is selected from the group consisting of blood, ocular lens fluid, cerebral fluid, milk, ascites fluid, synovial fluid, peritoneal fluid, amniotic fluid, tissue, fermentation broth, and cell culture.

Claim 2 (Original). The method of claim 1 wherein the binding buffer further comprises a reducing agent.

Claim 3 (Canceled).

Claim 4 (Canceled).

Claim 5 (Original). The method of claim 1 further comprising a wash step after separating the complexes from the test sample and before eluting the nucleic acid from the metal oxide support material.

Claim 6 (Currently amended). The method of claim 1 wherein eluting the nucleic acid from the metal oxide support material comprises contacting the complexes with a reagent selected from the group consisting of water ~~or~~ and a phosphate containing buffer.

Claim 7 (Original). The method of claim 6 further comprising the step of detecting the nucleic acid after the eluting the nucleic acid from the metal oxide support material.

Claim 8 (Original). The method of claim 7 further comprising the step of amplifying the nucleic acid after eluting the nucleic acid from the metal oxide support material and before detecting the nucleic acid.

Claim 9 (Previously presented). The method of claim 7 wherein the nucleic acid is separated from a test sample comprising more than one source of nucleic acid.

Claim 10 (Previously presented). The method of claim 9 wherein the nucleic acid separated from the test sample comprises RNA and DNA.

Claim 11 (Canceled).

Claim 12 (Previously presented). The method of claim 8 wherein the step of amplifying the nucleic acid is performed without removal of the elution buffer.

Claim 13 (Previously presented). The method of claim 1 wherein eluting the nucleic acid from the metal oxide support material comprises contacting the complexes with an elution buffer having a pH of between 6 and 10.

Claim 14 (Previously presented). The method of claim 1 wherein eluting the nucleic acid from the metal oxide support material comprises contacting the complexes with an elution buffer having a pH of between 7 and 9.

Claim 15 (Previously presented). The method of claim 1 wherein eluting the nucleic acid from the metal oxide support material comprises contacting the complexes with an elution buffer comprising a sodium phosphate or organophosphate compound such that the phosphate concentration in the elution buffer is from 10 mM to 300 mM.

Claim 16 (Previously presented). The method of claim 1 wherein eluting the nucleic acid from the metal oxide support material comprises contacting the complexes with an elution buffer comprising a sodium phosphate or organophosphate compound such that the phosphate concentration in the elution buffer is from 10 mM to 100 mM.

Claim 17 (New). The method of claim 1 wherein the nucleic acid is HIV nucleic acid from plasma.

Claim 18 (New). The method of claim 1 wherein the nucleic acid is HBV nucleic acid from plasma.